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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/795,934	03/08/2004	Charles E. Taylor	112440-761	1339
29190 7590 01/10/2008 BELL, BOYD & LLOYD LLP P.O. BOX 1135 CHICAGO, IL 60690			EXAMINER MAYEKAR, KISHOR	
			ART UNIT 1795	PAPER NUMBER
			MAIL DATE 01/10/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/795,934	<b>Applicant(s)</b> TAYLOR, CHARLES E.	
	<b>Examiner</b> Kishor Mayekar	<b>Art Unit</b> 1795	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/04 &amp; 10/05</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 9, 10 and 15-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noguchi et al. (US 4,689,056) in view of Varga (US 4,771,361). Noguchi's invention is directed to an air cleaner using ionic wind, the air cleaner comprising the recited housing and an electro-kinetic system with a first electrode array, a second electrode array and a high voltage generator (Figs. 7 and 8). Noguchi further discloses in col. 9, lines 4-7 that the second electrode array is not limited to plate electrodes, but can be concentric electrodes. The difference between Noguchi and the above claims is the provision that the first electrode array includes a tubular electrode. Varga teaches an electrode arrangement for corona discharge for use in apparatus for purification of air the limitation of a tubular corona discharge electrode (Figs. 2 and 7). The subject matter as whole would have been within the level of ordinary skill in the art at the time the

invention was made to have modified Noguchi's teachings as shown by Varga because the selection of any of known equivalent corona discharge electrode's shapes would have been within the level of ordinary skill in the art.

As to the subject matter of claim 10, 19 and 30, Noguchi's Figs. 1, 3 and 7 in view of Varga disclose it.

3. Claim 7, 8, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noguchi '056 as modified by Varga '361 as applied to claims 1-6, 9, 10 and 15-31 above, and further in view of Lee (US 4,789,801). The difference between the references as applied above and the instant claims is the provision that the electrodes of the second electrode array each has a distal edge that tapers towards the first electrode array. Lee teaches the limitation in an electrokinetic transducing apparatus (Fig. 3). The subject matter as whole would have been within the level of ordinary skill in the art at the time the invention was made to have modified the references' teachings as shown by Lee because the selection of any of known equivalent electrode's shapes would have been within the level of ordinary skill in the art.

4. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noguchi '056 as modified by Varga '361 as applied to claims 1-6, 9, 10 and 15-31 above, and further in view of either JP 56-78645A or JP 11-47636A. The difference between the

references as applied above and the above claims are the provision of the recited germicidal UV lamp or the recited freestanding and vertically elongated housing. JP '645 teaches in air cleaner using ionic wind the provision of a UV lamp inside a housing (see abstract and Fig. 5). JP '636 with an English computer translation teaches in air cleaner using ionic wind the provision of a UV lamp inside a housing (Figs. 5 and 17). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the references' teachings as shown by either JP '645 or JP '636 because this would result in sterilizing the air in addition to the ionizing of air to remove particulate matter.

As to the subject matter of 12, JP '636 discloses in Figs. 5 and 17 the provision of preventing the leaking of UV light out of the lamp unit 61. Since the UV light is not leaked outside the lamp unit, the design will inherently preclude human viewing of the emitting UV light. As such, the motivation to make a specific structure as applied in the preceding paragraph is applied here.

5. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Noguchi '056 as modified by Varga '361 as applied to claims 1-6, 9, 10 and 15-31 above, and further in view of Rees (US 6,254,882 B1). The difference between the references as applied above and the instant claim is the provision of the recited wettable material. Rees teaches the use of an air freshener containing a liquid fragrance in an air handling (col.3,

lines 9-10 and Example 1). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the references' teachings as shown by Rees because this would result in freshening or neutralizing malodors in the air.

6. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Noguchi '056 as modified by Varga '361 as applied to claims 1-6, 9, 10 and 15-31 above, and further in view of Krause (US 6,056,808). The difference between the references as applied above and the above claims are the provision of the recited freestanding apparatus. Krause shows in air cleaner using ionic wind that the air cleaner can be manufactured as stand alone unit in addition to mounting in a duct (col. 3, lines 36-42). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the references' teachings as shown by Krause because it has been held that the motivation to make a specific structure is always related to the properties or uses one skilled in the art would expect the structure to have, *In re Newell* 13 USPQ 2d 1248, *Fromson v. Advance Offset Plate* 225 USPQ 26; *In re Gyurik* 201 USPQ 552.

7. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Noguchi

'056 as modified by Varga '361 as applied to claims 1-6, 9, 10 and 15-31 above, and further in view of Shoji (US 6,508,982 B1). The difference between the references as applied above and the instant claim is the provision of the recited housing. Shoji teaches in an air cleaning apparatus the provision of a housing with a battery (Fig. 2A and col. 5, lines 27-30). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the references' teachings as shown by Shoji because the selection of any of known equivalent power sources for powering the air cleaner would have been within the level of ordinary skill in the art.

### *Double Patenting*

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1-3, 8, 9, 11-17, 20-23, 25, 28 and 31 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 and 8-12 of U.S. Patent No. 6,544,485. The patent claims recites an air transporter-conditioner comprising the recited housing, an electro-kinetic system having a first electrode array and a second electrode array wherein the second electrode array comprises a plurality of concentrically disposed cylindrical electrodes, a high voltage system coupled between the first and second electrode arrays and a germicidal UV lamp, the patent claims being narrower than the above claims.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kishor Mayekar whose telephone number is (571) 272-1339. The examiner can normally be reached on Monday-Thursday.

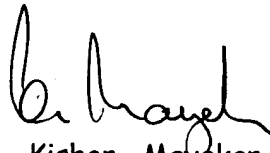
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Application/Control Number:  
10/795,934  
Art Unit: 1795

Page 8

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Kishor Mayekar', is positioned above the printed name.

Kishor Mayekar  
Primary Examiner  
Art Unit 1753